

depend from independent claims 7 and 26 include the amendments made thereto and also overcome the grounds of rejection.

In one embodiment of the invention, as particularly set forth in claim 7, an apparatus is provided for communicating and laterally directing electromagnetic radiation. The apparatus includes, a waveguide, a reflecting surface on the tip of the waveguide, a transmitting surface on the tip of the waveguide with a particular area within which radiation propagates in a lateral direction is incident at below a critical angle for transmission from the transmitting surface through the transmitting surface. The reflecting surface and the particular area have first and second widths that both extend to the reflecting surface, transverse to the propagation direction, and the second width is at least 4x greater than the first width.

In another embodiment, defined in claim 26, at least 90% of all electromagnetic radiation reflected by the reflecting surface is incident on the transmitting surface at below a critical angle for transmission through the transmitting surface.

Claim 19 is still pending in the application.

Claims 7, 8, 16, 19, 20, 26 and 30 are rejected under §103 as being unpatentable over Payne et al. in view of Abe et al. This ground of rejection is respectfully traversed. Neither Payne et al. or Abe et al. disclose singularly or in combination, the limitations in claims 7 and 26, e.g., that the reflecting surface of the particular area has first and second widths, and the second width is 1.4x greater than the first width (claim 7); or that at least 90% of all electromagnetic radiation reflected by the reflecting surface is incident on the transmitting surface at below a critical angle for transmission through the transmitting surface (claim 26).

Payne et al. is directed with the beveled tip, and not to the criticality of different widths at the tip of the fiber. Abe et al. does not address issues relating to different layers of an optical fiber

In fact combining the teachings of Payne et al. and Abe et al. does not suggest that the limitations in claims 7 and 26 are possible, necessary or desirable.

Thus, assuming that it would be proper to combine the two references, the combination does not render obvious the limitations found in amended claims 7 and 26.

For these reasons, it is submitted that the rejected claims are now in condition for allowance, which is earnestly solicited.

CONCLUSION

It is submitted that the present application is in form for allowance, and such action is respectfully requested.

Respectfully submitted,

Date: 12/8/94

By: 

Paul Davis
Registration No. 29,294

HAYNES & DAVIS
2180 Sand Hill Road, Suite 310
Menlo Park, California 94025-6935
Telephone: (415) 233-0188

C